

Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

1. (Currently Amended) A method for introducing a compound into a Gram negative bacterial cell, the method comprising contacting the cell, in the absence of a membrane-permeabilizing agent, with a biotinylated compound, wherein the compound comprises a peptide and wherein the contact is effective to deliver the compound into the cytosol of the cell.
2. (Canceled)
3. (Currently Amended) A method for introducing a compound into a Gram negative bacterial cell, the method comprising contacting the cell, in the absence of a membrane-permeabilizing agent, with a biotinylated compound, wherein the contact is effective to deliver the compound into the cytosol of the cell.
4. (Canceled)
5. (Currently Amended) A method for identifying a compound having antimicrobial activity comprising:
contacting a Gram negative bacterial cell, in the absence of a membrane-permeabilizing agent, with biotinylated compound to cause uptake of the biotinylated compound [[by]] into the cytosol of the cell;
determining whether the biotinylated compound has an antimicrobial effect on the cell.

Serial No.: 10/579,248

Confirmation No.: 7812

Filed: February 28, 2007

For: BIOTIN-FACILITATED TRANSPORT IN GRAM NEGATIVE BACTERIA

6. (Canceled)

7. (Previously Presented) The method of claims 3 or 5 wherein the compound comprises a peptide.

8. (Previously Presented) The method of any of claims 1, 3 or 5 further comprising linking a biotin moiety to the compound to yield the biotinylated compound.

9-20. (Canceled)

21. (Currently Amended) The method of claim 1 wherein the peptide or ~~peptidomimetic~~ is conjugated to first and second bioactive compounds, wherein the first bioactive compound comprises biotin.

22. (Previously Presented) The method of any of claims 1, 3 or 5 wherein the Gram negative bacterial cell is a cell of the genus *Escherichia*, *Salmonella*, or *Pseudomonas*.

23. (Previously Presented) The method of claim 22 wherein the Gram negative bacterial cell is an *E. coli* cell, a *S. typhimurium* cell, or a *P. aeruginosa* cell.

24. (Previously Presented) The method of any of claims 1, 3 or 5 wherein the Gram negative bacterial cell comprises a biotin transporter.

25. (Original) The method of claim 24 where the biotin transporter comprises a *birB/bioP* transporter.

26. (Original) The method of any of claims 1, 3 or 5 wherein the compound comprises a

therapeutic, diagnostic or imaging agent.

27. (Previously Presented) The method of claim 26 wherein the compound further comprises a targeting moiety that specifically targets a Gram negative bacterial cell.

28. (Original) The method of claim 27 wherein the targeting moiety comprises a receptor ligand or an antibody or fragment thereof.

29. (Previously Presented) The method of claim 26 wherein the compound comprises an antibiotic.

30-31. (Cancelled)

32. (Previously Presented) The method of any of claims 1, 3 or 5 wherein the Gram negative bacterial cell is a pathogen.

33. (Previously Presented) The method of any of claims 1, 3 or 5 wherein the compound, when introduced into the cell, inhibits the growth of the cell.

34. (Previously Presented) The method of any of claims 1, 3 or 5 wherein the compound, when introduced into the cell, causes the death of the cell.

35. (Previously Presented) The method of any of claims 1, 3 or 5 performed in the absence of calcium chloride.

36-43. (Canceled)